



TERRY E. BRANSTAD, GOVERNOR

10-2-5

Site: Atlantic Water
ID: 1AD039.954302
B-1: 11.7
Other: Atlantic Water/ Electric Power Plt
12-10-86

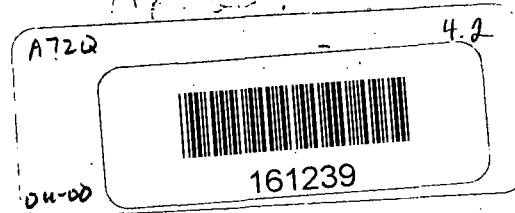
DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

December 10, 1986

Atlantic Water/Electric/Power Plant
15 W. 3rd Street
P.O. Box 517
Atlantic, IA 50022

ATTENTION: Superintendent of Utilities

SUBJECT: Permit Revision
Water Supply Permit No. 1509074



Dear Mr. Richard J. Stevens:

We are forwarding one copy of a revised water supply operation permit referenced above which was previously issued October 17, 1985.

Due to the elevated concentration of tetrachloroethylene found in the raw water samples collected from well #7, the Department is revising your water supply operational permit to restrict the use of that well and establish monitoring requirements for tetrachloroethylene. In addition, we are recommending that you continue to pump well #7 to waste.

If you have any questions or comments regarding this revision, please contact this office.

Sincerely,

KEITH L. DOHRMANN
WATER SUPPLY SECTION

KLD:bsg/WSM329L01.01

Enclosure

cc: Field Office 4

IOWA DEPARTMENT OF NATURAL RESOURCES

O P E R A T I O N P E R M I T

Permit Issued to:

Atlantic Water/Electric/Power Utilities
15 W. 3rd Street
P.O. Box 517
Atlantic, IA 50022

Permit Number: 1509074

Effective: January 1, 1987

Expires: November 30, 1987

The permittee is authorized to:

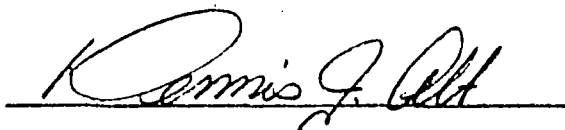
operate the public water system located in Cass County, and serving the residents of Atlantic, Iowa, subject to the applicable section of Chapter 455B, Code of Iowa, part 900 of the Iowa Administrative Code and the attached pages of special conditions including Appendix B&C.

You are required to file for renewal of this permit 60 days prior to the permit expiration date.

Conditions of this permit may be appealed as provided in Part 900 of the Iowa Administrative Code. Appeal must be in writing and must be received at the central office of the Department of Natural Resources, Henry A. Wallace Building, 900 East Grand, Des Moines, Iowa 50319 within thirty days of the date this permit is executed.

FOR THE DIRECTOR:

By:



Date Executed:

12/10/86

cc: Field Office 4

KLD:bsg/WSM329L01.02

APPENDIX B

Community Public Water System Monitoring Requirements and Maximum Contaminant Levels

<u>Contaminant</u>	<u>Monitoring Frequency Number of Samples Required</u>	<u>Maximum Contaminant Level (MCL)</u>
Microbiological		
Coliform Bacteria	9/month	Determined by analytical method and number of samples collected. See Department rule 41.3
Inorganic Chemicals		
Arsenic	1/3 years	0.05 mg/l
Barium	1/3 years	1 mg/l
Cadmium	1/3 years	0.010 mg/l
Chromium	1/3 years	0.05 mg/l
Fluoride	1/3 years	2.2 mg/l
Lead	1/3 years	0.05 mg/l
Mercury	1/3 years	0.002 mg/l
Nitrate (as NO ₃)	1/3 years	45 mg/l
<p>You are required to submit a drinking water sample from the water system to a certified laboratory for nitrate analysis in accordance with the above monitoring frequency until notified otherwise by letter from this Department or until the permit is amended or reissued.</p>		
Selenium	1/3 years	0.01 mg/l
Silver	1/3 years	0.05 mg/l
Sodium	1/3 years	No MCL Established
Radionuclides		
Gross alpha	1/4 years	15 pCi/l
Radium 226 & 228	1/4 years	5 pCi/l
Organic Chemicals		
Tetrachloroethylene	1/quarter-finished water (See Appendix C)	No MCL Established

APPENDIX C

A. Recommended Corrective Actions

1. It is recommended that the permittee continue to pump well #7 to waste as per your current practice.
2. The permittee is strongly encouraged to consider the development of additional wells, located outside the area of contamination, or to consider options to treat the drinking water to effectively remove the contamination.

B. Required Corrective Actions

1. The permittee is prohibited from using well #7 (drilled in 1949) as a source of drinking water.
2. If the permittee decides to develop additional wells or to install a treatment unit that will address the contaminants of well #7, the permittee is required to provide the Department with a schedule for the chosen action.

C. Monitoring and Reporting

1. Special Monitoring Conditions

- a. Submit a drinking water sample from the distribution system to a laboratory using analytical method OA-601 for tetrachloroethylene analysis every three (3) months and record the results on the monthly operation report.

The laboratory analytical data sheet must contain the following: Name of the Public Water Supply, sample location, date that the sample was collected, name of the contaminant, contaminant concentration, percent sample detection precision, accuracy (% recovery), quantitation limit, and analytical method utilized.

- b. Record the daily pumpage of each well and indicate the usage on the monthly operation report.

2. Reporting Requirements

- a. The permittee is required to notify this Department's Field Office in Atlantic, Iowa at (712/243-1934) when any sample collected from the distribution system and analyzed for tetrachloroethylene exceeds a concentration of 0.7 PPB (0.7 ug/l or 0.0007 mg/l).
- b. The permittee is required to submit a copy of the monthly operation report to the Field Office in Atlantic, Iowa on a monthly basis. The monthly operation report shall contain the information as specified in paragraph C.1 above.
- c. If the concentration of Tetrachloroethylene found in a distribution sample is analyzed to exceed 0.7 PPB, then the permittee is required to issue a public notice in accordance with Department rules or as approved by the Department. A copy of the public notice to be used is attached.

APPENDIX C
(Continued)

3. Noncompliance Reporting Requirements

If for any reason the public water supply does not comply with or will be unable to comply with the terms specified in paragraph 1 or 2 of Section B, "Monitoring and Reporting", the owner of the public water supply shall notify the Department of Natural Resources in writing within 14 days of becoming aware of the condition. Such notice shall contain an explanation of the cause of noncompliance, the length of time noncompliance is anticipated and the steps being taken to obtain compliance. In addition, the Department may require the public water supplier to give appropriate notification to its customers of the noncompliance.

D. Operation Requirements

The owner shall operate and maintain the public water system in a manner that will maximize the quality of the water.

E. Other Requirements

Nothing in this action shall relieve the public water supply from complying with all applicable State requirements concerning public water systems including monitoring, sampling, construction permits, operations and maintenance and limitations not covered by this document.

F. Permit Modification, Suspension or Revocation

If the terms of conditions of this compliance action are violated, the Department may revoke, modify or impose additional terms or conditions, including appropriate public notification as may be necessary to comply with the Safe Drinking Water Act.

PUBLIC NOTIFICATION EXAMPLE

TETRACHLOROETHYLENE IN WATER EXCEEDS HEALTH ADVISORY LIMIT

This notice is for informational purposes. It is not a notice of immediate hazard to water consumers.

The _____ Public Water Supply (also include areas served if they are not obvious from the name of the supply) wishes to advise its customers that the health advisory limit (HAL) for tetrachloroethylene has been exceeded in samples taken on _____ (give actual sampling dates or the time period when samples were collected). The level found in the water (was) (averaged) _____ ug/l (or PPB).

Tetrachloroethylene, also called perchloroethylene (PCE), is a synthetic organic chemical that is moderately toxic. It is a clear, colorless, liquid used mainly in dry cleaning. PCE is also used in metal degreasing, textile processing (dyeing) and in various pesticides. PCE is very mobile in soil and readily migrates to ground water. Once there, PCE remains for months or years.

According to an EPA Office of Drinking Water Health Advisory issued September 30, 1985, PCE has been rated as a probable human carcinogen. A concentration of 0.7 ug/l in drinking water is predicted to result in one excess cancer per 1,000,000 persons when consumed over a lifetime (70 years).

We will be working in coordination with the Iowa Department of Natural Resources in developing a plan to eliminate the PCE contamination to avoid any long-term, adverse, health effects. PCE at the level detected should not be harmful on a short-term basis.

However, if you are concerned about low-level PCE in your water on a short-term basis, there are several ways in which it may be removed from water right in your own home. One method is aeration by beating with an electric mixer at high speed for 10 minutes. The volatile nature of PCE will cause it to escape rapidly. Another method is boiling vigorously for 15 minutes. Both processes will remove 98-99% of the PCE originally present in the water. In addition to these home treatment methods, there are commercial home treatment units available for PCE removal. You can check with a reputable water treatment dealer or the Department of Natural Resources for further information at 515/281-5130.

(You should indicate names, addresses or phone numbers of persons who may be contacted if there are questions concerning PCE. If a routine sampling schedule has been established for your water supply, you may wish to include this information with an indication that you will provide the consumers with the analytical results on a regular basis. You should also include any corrective actions taken or anticipated to address the presence of PCE in your drinking water.)

GENERAL PERMIT CONDITIONS

1. ADMINISTRATIVE RULES

Rules of this Department which govern your facility operation in connection with this permit are published in Part 900 Chapter 41 of the Iowa Administrative Code. Reference to the term "rule" in this permit means the designated provision of Part 900, Iowa Administrative Code.

2. NOTICE OF CHANGED CONDITIONS

You are required to report any changes in existing conditions or information on which this permit is based. If any modification of, addition to, or construction of this water system is to be made, you must first obtain a written construction permit from this Department, in accordance with rule 41.12.

3. PERMIT MODIFICATION, SUSPENSION OR REVOCATION

- (a) This permit may be modified, suspended or revoked for causes specified in rule 41.6.
- (b) This permit may be modified due to changes in the conditions or information on which this permit is based.
- (c) If a primary standard maximum contaminant level is exceeded in your drinking water and there are no immediate, unreasonable risks to the health of persons served by the system, this permit will be modified to obtain compliance by inclusion of a compliance schedule (rule 41.7).
- (d) If a change in a standard is established by the Interim Primary Drinking Water Regulations, this permit may be modified in accordance with the new standard.

4. INSPECTION OF PREMISES, RECORDS, EQUIPMENT AND METHODS

You are required to permit authorized Department personnel to survey and inspect any construction, operation, and records of your water supply system in accordance with the Iowa Code, section 455B.174.

5. OPERATION AND MAINTENANCE

All facilities and control systems shall be operated as efficiently as possible and maintained in good working order, in accordance with rule 41.14, and a sufficient number of staff, adequately trained and knowledgeable in the operation of your facility shall be retained to achieve compliance with the terms of this permit.

KLD: _____/_____

6. RECORD KEEPING AND PUBLIC NOTIFICATION REQUIREMENTS

You are required to maintain the records of your operation in accordance with rule 41.5 as follows:

(a) The owner or operator of this water system shall retain on its premises or at a convenient location near its premises the following records:

- Bacterial analyses - Retain for five years
- Chemical analyses - Retain for ten years
- Records of actions taken to correct violations of primary drinking water regulations - Retain for three years
- Records concerning an operation permit issued pursuant to rule 41.7 - Retain for five years
- Copies of any written reports, summaries or communications relating to sanitary surveys conducted at your system, by a private consultant or by any local, state or federal agency - Retain for ten years

(b) The supplier of water shall notify the public as required in rule 41.5:

- Whenever the water system exceeds a maximum contaminant level
- When issued an operation permit or modified permit in accordance with rule 41.7
- Upon failure to comply with a compliance schedule indicated in an operation permit

7. TRANSFER OF TITLE

If title to your facility or any part of it is transferred, the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to such transfer of title. The executive director of this Department shall be notified in writing of such transfer within 30 days (rule 41.6).

8. SEVERABILITY

If any provision or application of any provision to any circumstances is found to be invalid by this Department or a court of law all other provisions/conditions shall remain effective.

9. APPLICATION OF OTHER AUTHORITY

This permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility.

KLD: _____/_____